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Klaus E. Schauser

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Boston, MA 02109

EXAMINER

KIM, PAUL

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/709,141 | Applicant(s) SCHAUSER ET AL. | |
| | Examiner PAUL KIM | Art Unit 2169 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/31/09</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. This Office action is responsive to the following communication: Amendment filed on 31 August 2009.
2. Claims 1-26 are pending and present for examination.

Continued Examination Under 37 CFR 1.114

3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 31 August 2009 has been entered.

Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 31 August 2009 in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements are being considered by the examiner.

Response to Amendment

5. Claims 1, 2, 4-6, 8, 10, 13-14, and 26 have been amended.
6. No claims have been added.
7. No claims have been cancelled.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over Boss et al (U.S. Patent No. 6,329,984, hereinafter referred to as BOSS), filed on 26 November 1997 and issued on 11 December 2001, in view of Salesky et al (U.S. Patent No. 6,343,313, hereinafter referred to as SALESKY), filed on 25 March 1997, and issued on 29 January 2002.

10. **As per independent claims 1, 14, and 26**, BOSS, in combination with SALESKY, discloses:

A bandwidth-adaptive method for synchronizing display data between a source node and a plurality of consumer nodes, the method comprising the steps of:

- (a) identifying, by a source node, a change in local display data {See BOSS, C8:L6-9, wherein this reads over "when there is a change in the number or positions of windows on the host system, detection of covered portion of shared tasks feature of the present invention is initiated"};
- (b) creating, by the source node, at least one data packet representing the change in local display data {See BOSS, C8:L21-29, wherein this reads over "a communication packet containing the window list created in blocks 354 through 359 is sent to the client system"};
- (c) receiving, by a communications service from the source node {See BOSS, Figure 3, Element 108}, a metadata packet identifying data packets that represent a current state of local display data following the change in local display data, the metadata packet being a separate packet from the identified data packets {See BOSS, C8:L4-29, wherein this reads over "the window in the list is marked as being shared" and "a communication packet containing the window list created in blocks 354 through 359 is sent to the client system"};
- (d) receiving, by the communications service from the source node {See BOSS, Figure 3, Element 108}, at least one of the identified data packets {See BOSS, C8:L30-43, wherein this reads over "[o]nce the communication packet is transmitted to and received by the client system, a censor routine is initialized"};
- (e) selecting, by the communications service {See BOSS, Figure 3, Element 108}, first and second sets of identified data packets responsive to the received metadata packet, the first and second sets being different from one another {See BOSS, C8:L44-46, wherein this reads over "[i]f the window in the communication packet examined belongs to a shared task, then in block 370 the window region is added to the shared region"};
- (f) transmitting, by the communications service to a first consumer node {See BOSS, Figure 3, Element 200}, the metadata packet along with {See BOSS, C8:L4-29, wherein this reads over "the window in the list is marked as being shared" and "a communication packet containing the window list created in blocks 354 through 359 is sent to the client system"} the first set of identified data packets; and

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(g) transmitting, by the communications service to a second consumer node {See BOSS, Figure 3, Element 200} having a different bandwidth connection with the communications service than the first consumer node has with the communications service, the metadata packet along with the second set of identified data packet {See SALESKY, C20:L38-C21:L31, wherein this reads over "[e]ach attendee client is assigned to a class, on the basis of announced or measured characteristics of the client and its network clients" and "[c]lass 2 client might not be able to process each block, even uncompressed blocks, in which case filter 100 will discard blocks"}₄.

whereby the first and second consumer nodes are transmitted a common metadata packet, but different data packets along therewith¹.

While BOSS may fail to expressly disclose a consumer node having a different bandwidth connection than another consumer node, SALESKY discloses a system wherein a plurality of clients is connected to various networks with different network connection speeds. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above invention suggested by BOSS with the invention as disclosed by SALESKY.

One of ordinary skill in the art would have been motivated to do this modification so the transmission of data packets to clients with differing network connection speeds may be managed accordingly.

11. **As per dependent claims 2, 15, 17,** BOSS, in combination with SALESKY, discloses:

The method of claim 1 further comprising receiving, by the communications service prior to selecting a set of the identified data packets responsive to the received metadata information, a request from a consumer node for the current state of the source node local display data {See BOSS, C7:L16-20, wherein this reads over "sensor application 107 monitors Windows system 105 to determine if there is any new task created"}.

12. **As per dependent claim 3,** while BOSS may not expressly disclose the repeating of "steps (a) through (d) until a request is received from a consumer node for the current state of the changing data set," it would have been obvious to one of ordinary skill in the art at the time the invention was made to iteratively repeat steps (a) through (d) so that when state of the source node changes, data packets identifying the changes may be transmitted and received.

¹ Examiner's Note. The Examiner notes that the limitation of "whereby the first and second consumer nodes are transmitted a common metadata packet, but different data packets along therewith" is unclear and indefinite. For the purposes of this examination, prior art will not be applied to the aforementioned limitation.

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13. **As per dependent claim 4**, BOSS, in combination with SALESKY, discloses:

The method of claim 3 wherein selecting a set of the identified data packets responsive to the received metadata information comprises:

(e-a) selecting one of the metadata information received by the communications service {See BOSS, C8:L44-46, wherein this reads over "[I]f the window in the communication packet examined belongs to a shared task, then in block 370 the window region is added to the shared region"}; and

(e-b) selecting at least one of the data packets received by the communications service and identified by the selected metadata information {See BOSS, C8:L44-46, wherein this reads over "[I]f the window in the communication packet examined belongs to a shared task, then in block 370 the window region is added to the shared region"}.

14. **As per dependent claim 5**, BOSS, in combination with SALESKY, discloses:

The method of claim 1 wherein selecting a set of the identified data packets responsive to the received metadata information comprises selecting a plurality of the identified data packets responsive to the received metadata information {See BOSS, C8:L44-46, wherein this reads over "[I]f the window in the communication packet examined belongs to a shared task, then in block 370 the window region is added to the shared region"}.

15. **As per dependent claim 6**, BOSS, in combination with SALESKY, discloses:

The method of claim 5 wherein transmitting to the first consumer node the first set of identified data packet comprises transmitting to the first consumer node a first plurality of data packets {See BOSS, C8:L4-29, wherein this reads over "the window in the list is marked as being shared" and "a communication packet containing the window list created in blocks 354 through 359 is sent to the client system"} selected therefore, and wherein transmitting to the second consumer node the second set of identified data packets comprises transmitting to the second consumer node a second plurality of data packets selected therefor.

16. **As per dependent claim 7**, while BOSS may not expressly disclose the method step of receiving from the source node at least one of the identified data packets in encrypted form, it would have been obvious to one of ordinary skill in the art at the time the invention was made to encrypt data packets so that said packets may be transmitted in secure form.

17. **As per dependent claims 8 and 22**, BOSS, in combination with SALESKY, discloses:

The method of claim 1 further comprising storing the metadata information received by the communications service in a memory device {See BOSS, Figure 13a-c}.

18. **As per dependent claims 9 and 20**, BOSS, in combination with SALESKY, discloses:

The method of claim 1 further comprising storing at least one of the data packets received by the communications service in a memory device {See BOSS, Figure 13a-c}.

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19. **As per dependent claims 10 and 16**, BOSS, in combination with SALESKY, discloses:

The method of claim 9 further comprising:

selecting at least one of the stored data packets responsive to the metadata information received by the communications service {See BOSS, C8:L44-46, wherein this reads over "[i]f the window in the communication packet examined belongs to a shared task, then in block 370 the window region is added to the shared region"}.

20. **As per dependent claim 11**, BOSS, in combination with SALESKY, discloses:

The method of claim 10 where step (g) comprises:

(g-a) transmitting to the consumer node the selected at least one of the received data packets {See BOSS, C8:L4-29, wherein this reads over "the window in the list is marked as being shared" and "a communication packet containing the window list created in blocks 354 through 359 is sent to the client system"}; and

(g-b) transmitting to the consumer node the selected at least one of the stored data packets {See BOSS, C8:L44-46, wherein this reads over "[i]f the window in the communication packet examined belongs to a shared task, then in block 370 the window region is added to the shared region"}.

21. **As per dependent claim 12**, BOSS, in combination with SALESKY, discloses:

The method of claim 1 further comprising storing, in a memory element, information identifying a data packet transmitted to one of the first and second consumer node {See BOSS, Figure 13a-c}.

22. **As per dependent claim 13**, BOSS, in combination with SALESKY, discloses:

The method of claim 12 further comprising selecting at least one of the data packets received by the communications service responsive to the metadata information received by the communications service {See BOSS, C8:L4-29, wherein this reads over "the window in the list is marked as being shared" and "a communication packet containing the window list created in blocks 354 through 359 is sent to the client system"} and to the stored information identifying the data packet transmitted to one of the first and second the consumer node {See BOSS, C8:L44-52, wherein this reads over "the above described process between blocks 364 and 371 is repeated until there are no more windows in the communication packet"}.

23. **As per dependent claim 17**, BOSS, in combination with SALESKY, discloses:

The system of claim 15 further comprising the second consumer node, the second consumer node configured to request the current state of the source node local display data from the communications service {See BOSS, C8:L30-43, wherein this reads over "the last window in the communication packet . . . is examined"; and "the window is examined if it belongs to a shared task"}.

24. **As per dependent claim 19**, while BOSS may not expressly disclose that a communication service selects a first metadata packet to transmit to the first consumer node and a second metadata

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packet to transmit to the second consumer node, it would have been obvious to one of ordinary skill in the art at the time the invention was made that where there are more than one consumer nodes, the communication service would appropriately send each consumer node a metadata packet acknowledging the change in states of the source node since each node may having different shared tasks.

25. **As per dependent claim 21**, while BOSS may not expressly disclose that the memory element is a persistent storage device, it would have been obvious to one of ordinary skill in the art at the time the invention was made that a persistent storage device may be used to store transmitted data such as metadata and data packets.

Response to Arguments

26. Applicant's arguments filed 31 August 2009 have been fully considered but they are not persuasive.

a. Rejections of Claims 1 and 14 under 35 U.S.C. 103

Applicant asserts the argument that the combination of Boss and Salesky fail to disclose the method of communicating with a variety of client communication systems in a bandwidth-adaptive manner. See Amendment, page 10. The Examiner respectfully disagrees. It is noted that Salesky discloses a system wherein attendee clients to an online conference are classified into one of three classes according to the measured characteristics of the client and its network connection. See Salesky, col. 20, lines 38-45. Furthermore, it is noted that while Class 1 clients (i.e. fast attendee clients) receive all the data blocks, Class 2 clients only receive critical data blocks while other blocks are discarded. See Salesky, col. 20, line 54 - col. 21, line 14. Accordingly, it would have been obvious to one of ordinary skill in the art that Salesky indeed a communication system which operated in a bandwidth-adaptive manner.

Additionally, while Applicant asserts that the combination of Boss and Salesky fails to disclose the transmission of a same metadata packet to a plurality of clients, it is noted that Salesky discloses that Class 1 and Class 2 clients are sent base data types (i.e. metadata packets)

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and not the delta data types. Accordingly, it is noted that the combination of Boss and Saleksy would indeed disclose an invention wherein a same metadata packet is transmitted to a plurality of clients while other identified data packets which are different are sent only to a specified client.

b. Rejection of Claim 26 under 35 U.S.C. 103

Applicant asserts the argument that neither Boss nor Salesky teaches or suggest "generating third metadata information through a comparison of first and second metadata information." See Amendment, page 12. The Examiner respectfully disagrees. Is noted that Salesky discloses an invention wherein "delta blocks are generated by a delta block generator 110, which records a previous base block and differences it with a current base block." See Salesky, col. 19, lines 48-65. Accordingly, wherein the delta blocks (i.e. a third metadata information) is used to identify which base data blocks need to be transmitted, it would have been obvious to one of ordinary skill in the art that the combination of Salesky and Boss would indeed disclose the aforementioned claim limitation.

For the aforementioned reasons above, the claim rejections under 35 U.S.C. 103 are maintained.

Conclusion

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAUL KIM whose telephone number is (571)272-2737. The examiner can normally be reached on M-F, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tony Mahmoudi can be reached on (571) 272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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